

AMENDMENTS TO THE SPECIFICATION

On page 10, line 6 through page 11, line 2 of the specification, please replace the paragraph with the following amended paragraph:

A preferred embodiment of synthesizing polymer arrays with a programmable micro-mirror array using the DMT process with photoresist takes place as follows. First, a computer file is generated and specifies, for each photolithography step, which mirrors in the micro-mirror array 1 need to be on and which need to be off to generate a particular predetermined image pattern. Next, the individual chip or the wafer from which it is made 4 is coated with photoresist on the synthesis surface and is mounted in a holder or flow cell (not shown) on the photolithography apparatus so that the synthesis surface is in the plane where the image of the micro-mirror array 1 will be formed. The photoresist may be either positive or negative thus allowing deprotection at locations exposed to the light or deprotection at locations not exposed to the light, respectively (example photoresists include: negative tone SU-8 epoxy resin (Shell Chemical) and those shown in the above cited patents and U.S. patent appl. no. 08/634,053, filed April 17, 1996, now U.S. Pat. No. 5,959,098, issued September 28, 1999). A mechanism for aligning and focusing the chip or wafer is provided, such as a x-y translation stage. Then, the micro-mirror array 1 is programmed for the appropriate configuration according to the desired predetermined image pattern, a shutter in the arc lamp 3 is opened, the chip or wafer 4 is illuminated for the desired amount of time, and the shutter is closed. If a wafer (rather than a chip) is being synthesized; a stepping-motor-driven translation stage moves the wafer by a distance equal to the desired center-to-center distance between chips and the shutter of the arc lamp 3 is opened and closed again, these two steps being repeated until each chip of the wafer has been exposed.